

TECHNICAL REPORT

Poverty in Ghana, 1991 to 1999

A Country Case Study



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Poverty in Ghana, 1991 to 1999

In this paper we analyze an episode of poverty reduction in Ghana. The poverty rate fell sharply during the 1990s, and income distribution became more equal. This was a period of government retrenchment and steady movement toward increased use of market forces and opening of the economy to world markets. The principal factor in the poverty reduction between 1991 and 1999 appears to have been the growth in the economy.

The Poverty Reduction Episode

THE POVERTY DECLINE

Between 1991/92 and 1998/99, severe poverty fell sharply, from 36.5 percent of the population to 26.8 percent, a reduction of 27 percent over seven years. (For comparison, the international development target for poverty reduction is a 50 percent decline in the share of the population in poverty over a 25-year period. Were Ghana to continue to reduce poverty at the same rate that it did 1991–1999, it would achieve a 50 percent reduction in less than 16 years.)

Table 1 shows the trend in poverty over the period for urban and rural areas. As the table shows, the great majority of Ghana's poor live in rural areas. Of the country's 5 million poor people in 1998/99, all but 720,000 lived in rural areas. Poverty reduction, however, was greater in rural than in urban areas during the period studied.

Table 1
Poverty in Ghana, 1991/92– 1998/99

Year	Headcount Poverty Rate (%)			Numbers in Poverty (thousands)		
	Combined	Rural	Urban	Total	Rural	Urban
1991/92	36.5	47.2	15.1	5,796	5,002	794
1998/99	26.8	34.4	11.6	5,000	4,280	720
Change (%)	-27.0%	-27.0%	-23.0%	-14%	-14%	-9%

SOURCE: Ghana Statistical Service, 2000

The source of the data is the Ghana Living Standards Survey (GLLS), third and fourth rounds, carried out in 1991/92 and 1998/99, respectively. This series of surveys has received substantial

support from the World Bank. The first two rounds of the survey, in 1987/88 and 1988/89, were part of a larger effort, the Living Standards Measurement Study (LSMS), which sought to identify and disseminate the state of the art in household surveys. The LSMS produced more than 150 technical papers, a number of them on Ghana. Consequently, the GLLS can be considered to be of high quality compared to the typical survey in a developing country.

Even though the initial surveys were carried out with substantial technical support from the World Bank, the early experience suggested that the methodologies being used were not sufficiently precise. Methodological changes to make the surveys more sophisticated were introduced over time, particularly between the second and third surveys. The changes at this time included

- Eliminating some expenditures, such as major hospital treatment and transfers to other households, from the household consumption total;
- Using adult equivalence scales in measuring household size, rather than treating all members equally, regardless of age or sex;
- Using a “more reliable” regional price index; and
- Using poverty lines linked to nutritional requirements, rather than to percentages of average consumption.

As a result of these changes, the poverty measure in the third and fourth surveys differs from that in the first two. Nevertheless, the process of poverty decline does extend back to the first survey in 1987/88. By the old methodology, the share of the population in poverty fell from 36 percent in 1987/88 to 31 percent in 1991/92. The methodological changes in the third round of the survey resulted in a higher measured poverty rate of 36.5 percent. It should be emphasized that a 36.5 percent poverty rate in 1991/92 using the new methodology is equivalent to 31 percent with the old one in 1991/92.

In order to determine a longer time trend of poverty in Ghana, one might be tempted to use the rate of decline in poverty between the first and third surveys to re-estimate the 1987/88 poverty rate according to the new methodology. Such an approach would yield a poverty rate in 1987/88 on the order of 42 percent. Such retroactive correction is not done, however. Household survey results are reported in international databases as if the methodology were uniform over time, although this is seldom the case in fact. Consequently, we limit the discussion of poverty rates in the rest of this paper mostly to the period of the third (1991/92) and fourth (1998/99) surveys, although the poverty reduction process appears to have been steady and consistent for a longer period of time.

POVERTY REDUCTION BY ECONOMIC SECTOR

Which sectors of the population benefited from the reduction in overall poverty? Table 2 provides an answer to this question. All categories of employment except for non-working benefited. Those who benefited most were workers in the formal private sector, for whom the poverty rate fell by 70 percent, and export farmers, for whom it fell by 61 percent. Public sector employees saw a decline of 55 percent. Food crop farmers, the group with the highest poverty rate in 1991/92, also had the slowest decline in poverty rate, with a decline of 13 percent—from 51.8 percent to 45 percent.

Table 2
Poverty and Employment by Category in Ghana, 1991/92 and 1998/99

Category of Employment	Poverty Rate (%)		Change in Poverty Rate (%)	Share of Population		Change in Share of Pop. (%)
	1991/92	1998/99		1991/92	1998/99	
Public Sector Employees	21.2	9.5	-55	13.5	10.7	-21
Formal Private Sector Employees	15.1	4.5	-70	3.9	4.9	26
Informal Private Sector Employees	22.5	16.1	-28	3.1	2.9	-6
Export Farmers	49.6	19.4	-61	6.3	7.0	11
Food Crop Farmers	51.8	45.0	-13	43.6	38.6	-11
Nonfarm Self-employed	23.3	18.1	-22	27.6	33.8	22
Nonworking	13.0	15.1	16	2.0	2.1	5
All	36.5	26.8	-27	100.0	100.0	

SOURCE Ghana Statistical Service, 2000, p. 37

The change in poverty rates for particular categories of employment is only half the story. Much poverty reduction may come from the movement of people from high-poverty categories to lower-poverty ones. The last several columns of Table 2 provide information on this issue. The first row of the table shows that the share of the population employed in the public sector fell by 21 percent over the period. Thus, compensation of government employees rose significantly, but the share of the population benefiting from it fell significantly. The other sectors with big reductions in the poverty rate, however, showed large increases in employment. The share of the population working in the private formal sector grew by 26 percent, non-farm self-employed by 22 percent, and export farmers by 11 percent. Food crop farmers fell from 44 percent to 39 percent of the employed population. Thus, there was a shift in the labor force away from the poorest category into more remunerative ones in the private sector. And—despite the sharp retrenchment in the public sector during this period—the share of the population classed as non-working increased only marginally.

TRENDS IN INCOME DISTRIBUTION

During the period under study, income distribution became more equal. Table 3 shows the basic data; it includes income distribution data from all four of the GLLS surveys because the methodological changes are not likely to have significantly affected the measurement of the distribution of consumption as they did the calculation of the share of the population considered to be in poverty. The Gini coefficient is a widely used statistic for measuring income inequality. It varies from zero when all households have equal incomes or expenditures (depending on which variable is being compared) to 1 when one household has all the income or expenditures. Crudely, a Gini coefficient below 0.4 is generally considered to reflect relative equality, while one above 0.5 shows high inequality. The Gini coefficient for expenditures—the measure used here—will be lower than a Gini coefficient for income.

Table 3
Income Inequality in Ghana, 1987 to 1998

Period	Gini Coefficient	Expenditure Share by Quintile (%)				
		Lowest	Second	Middle	Fourth	Highest
1987/88	0.354	7.0	11.7	16.3	22.3	42.7
1988/89	0.360	7.0	11.5	16.0	22.1	43.4
1991/92	0.339	7.9	12.0	16.1	21.8	42.2
1997/98	0.327	8.5	12.0	16.0	21.9	41.6

SOURCE: World Bank, *Global Poverty Monitoring database*

As Table 3 shows, the Gini coefficient fell from a relatively low 0.354 to a lower 0.327. Even before the decline in inequality during this period, Ghana already had the lowest Gini coefficient in Africa (Deininger and Squire 1996). The table also shows quintile shares of income for 1987/88 through 1997/98. The poorest quintile of the expenditure distribution saw its share rise significantly, while that of the richest quintile fell. The shares of the other quintiles remained virtually constant.

RELIABILITY OF THE DATA

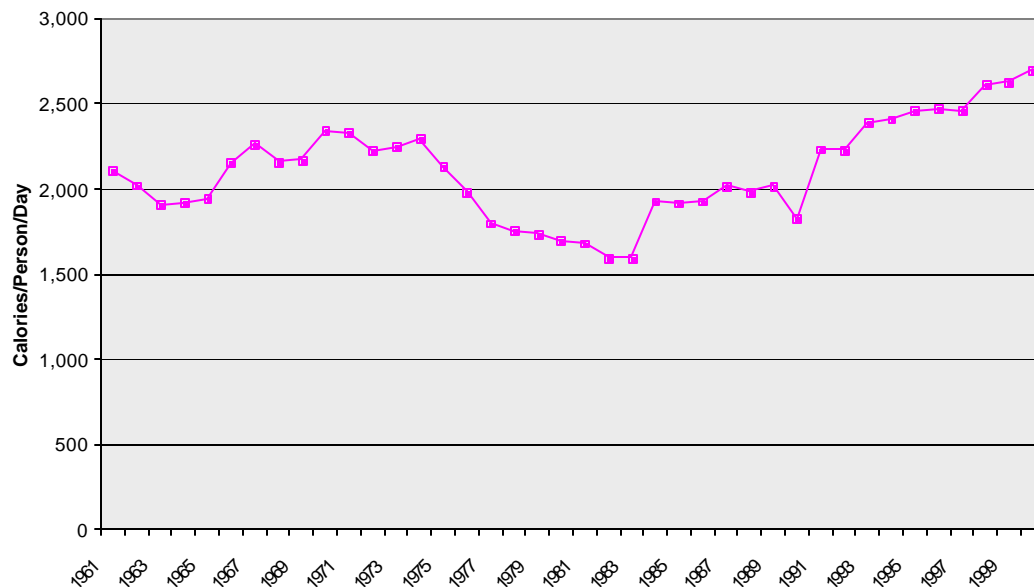
These Ghana data tell a very encouraging story. Poverty has fallen substantially over a decade, and income distribution—already the most equal in Africa—became more equal. How reliable is this finding?

Household surveys are imperfect instruments for measuring welfare. Even when surveys can be carried out with few errors by enumerators—something that cannot be expected in poor countries—methodological issues are substantial. Although survey methodology has changed over time in Ghana, anyone with the desire could point out significant methodological weaknesses in even the revised approach. Methodology aside, difficulties of implementation, such as training of enumerators and ensuring that money values represent equivalent real values, are daunting. Finally, there is sampling error. The Ghana surveys are small (about 3,000 households), so significant uncertainty arises about the true values of surveyed variables. It is not common practice to publish confidence intervals for such surveys, but three percentage points plus or minus is probably a conservative estimate. This suggests that poverty comparisons made over short periods of time are probably of little value in relating poverty to government policies. The error margin will likely be larger than the difference in values for the two surveys.

An alternative approach to judging the reliability of household surveys is to compare the results with other independent estimates of trends in well-being. One valuable, but underutilized, source for such estimates is the Food and Agriculture Organization (FAO) of the United Nations. FAO publishes annual estimates of per capita caloric intake for most countries in the world. Although the distribution of caloric consumption among a population will vary with income, this distribution, like the income distribution, tends to be stable over time in a particular country. The distribution of caloric intake is also much more equal than the distribution of income in any country. Caloric consumption has upper limits, whereas monetary consumption appears to have none.

Figure 1 shows the trend in per capita caloric intake for Ghana since 1961, as reported by the FAO. Average caloric intake rose steadily and sharply during the 1990s. This trend strongly corroborates the evidence shown in Table 1 that poverty fell substantially. The figure is also consistent with a steady reduction in poverty since the nadir in caloric intake in 1983.

Figure 1
Average Caloric Intake in Ghana, 1961–2000



THE PROBLEM OF THE GLOBAL POVERTY MONITORING DATABASE

The poverty data in Table 1 are those reported from the third (1991/92) and fourth (1998/99) rounds of the Ghana Living Standards Survey, carried out by the Ghana Statistical Service with support from the World Bank. There is no other representative data set for the period being considered. Nevertheless, the World Bank's Global Poverty Monitoring (GPM) database reports a different—and clearly unreasonable—set of numbers. According to the GPM data, only 1.2 percent of Ghanaian households lived in severe poverty in 1992, but this share rose to 78.4 percent in 1998. The GPM estimates for both years are unreasonable—the figure for 1992 is far too low, and that for 1998 is far too high. Worse, it is inconceivable that the favorable economic trends between 1992 and 1998 could have led to such deterioration in living standards. Efforts to have the GPM numbers reviewed and corrected have so far been unavailing. The GPM numbers for Ghana were part of the data set for another paper in the series, *The Effect of Economic Growth on Poverty and Income Distribution in Developing Countries*. The presence of such erroneous observations for individual countries is surely one reason why regressions using the data set are not robust.

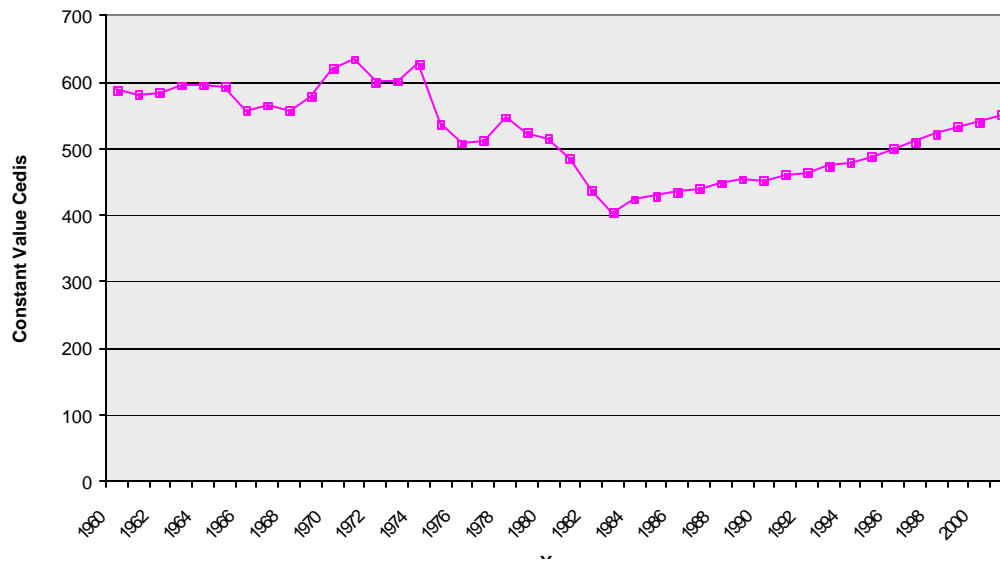
The Poverty Reduction Episode in Ghana's Development History

Ghana was the first of the colonial African countries to gain independence, doing so in 1957 under the leadership of Kwame Nkrumah. Like many others, Nkrumah believed that independence would set off an upward spiral of prosperity as the colonial yoke was lifted. He had earlier predicted, "If we get self-government, we'll transform the Gold Coast into a paradise in ten years," (cited in Yergin and Stanislaw 1998, 84). Unfortunately, Nkrumah's prediction was not realized. Nkrumah's policies of forced industrialization through heavy government ownership, government control of foreign trade, and a large government bureaucracy failed to achieve their purposes. Nkrumah was deposed in 1966 during an economic downturn. Several subsequent governments continued the same policy orientation, worsened by increasing levels of corruption that led some to term the Ghanaian government a "vampire state," preying on the people of the country (Austin 1996). Karikari (1995, 85) provides econometric results showing that from 1963 to 1984, "... the impact of government on economic growth was unambiguously negative."

Figure 2 shows the trend in per capita GDP since 1960. During the 1960s, per capita income remained about constant, but fell sickeningly through the 1970s and early 1980s. In 1984, after the existing model had clearly been shown to have been disastrous, the government began a structural adjustment program with the World Bank and IMF. Unlike many such programs, the original design and subsequent implementation occurred under strong Ghanaian leadership. The process appears to have been a very collaborative one between the host government and the international agencies (Tsikata 2001, 80–82.) Although many steps to free the economy were taken at the outset of the program, the reform process is best described as steady gradualism. Retrenchment of the bloated government bureaucracy, privatization of government enterprises, freeing up of the market for cocoa, and reducing the cocoa export tax have all occurred gradually and incompletely.

As Figure 2 shows, growth since 1983 has been remarkably stable. Per capita income rose every year but one (1990) between 1984 and 2001. For the entire period, growth in per capita GDP averaged 1.7 percent per year. Since 1991, per capita growth has been slightly higher, at 1.8 percent per year. This is entirely due to slower population growth (2.2 percent during the 1990s, down from 3.7 percent during the 1980s), for growth of total GDP was significantly slower, at 4.3 percent per year during 1991–1999, than it had been during the 1984–1991 period.

Figure 2
Ghana Per Capita GDP, 1960–2001



What Policies Were Associated with the Poverty Reduction?

Ghana followed a rather orthodox set of economic policies during the period studied, with substantial support from the World Bank and IMF. The relationship between Ghanaian government actions and poverty reduction over the period studied has not been addressed extensively. Several authors associated with the World Bank and IMF have concluded that the economic growth that resulted from these policies was the main source of the poverty reduction during the period. For example, Pellechio and Khemani (2000, 122), and Christiaensen, Demery, and Patenostro (2002) link poverty reduction to growth, but do not offer significant analysis. Appiah et al (2001, 318) also take for granted that economic growth is an essential factor in reducing Ghanaian poverty. Table 2 seems to support this view because the changes in the structure of employment favored sectors such as formal urban firms and export farmers that benefited from liberalization of the economy. The decline in poverty in those sectors reinforces this interpretation.

Besides instituting the orthodox programs of devaluation, reduced government spending, and market liberalization, the Ghanaian government has developed and maintained social safety net and poverty alleviation programs. The first of these was introduced in late 1987 as part of the World Bank and IMF-supported structural adjustment program. The Programme of Actions to Mitigate the Social Costs of Adjustment (PAMSCAD) was less a safety net for the poorest than assistance for those affected by adjustment, even if those affected were not poor. Thus, the largest single use of the funds (Hutchful 2002, 118) was for payments to retrenched government workers. Other funds went to urban unemployed, even though most of Ghana's poor lived in rural areas. PAMSCAD generally was seen as too centralized and bureaucratic, and after 1992 it was replaced by a variety of social programs implemented by lower levels of government. Nevertheless, these programs were modest in scope and probably did not play a significant role in the decline in poverty in the 1990s. Hutchful (2002, 119) complains that the government's strategy in 1993 was to

achieve poverty reduction through economic growth rather than through direct programs to reduce poverty. Hutchful's view that direct programs for poverty reduction were desirable flies in the face of most Ghanaian experience since independence. Direct government poverty programs were being undertaken throughout the period when the country's economy was declining—and when poverty was surely increasing.

Government fiscal policy during the early 1990s is of particular interest for the discussion of poverty. In early 1992, the country adopted a new constitution, and democratic elections were held in November of that year. Although the person elected to the office, Jeremy Rawlings, had already ruled the country for more than a decade, the election was a democratic one. The run-up to the election brought out behavior patterns that are common in election years. Ghana had maintained good fiscal performance under its IMF program up to 1992, gradually bringing inflation down. In 1992, however, the government gave civil servants an 80 percent wage increase during the pre-election period. This along with other spending increases, produced a fiscal deficit of 4.9 percent of GDP, compared with a surplus of 1.8 percent the previous year. This brought inflation back. Economy-wide inflation had been brought down to 11 percent in 1992, but the wage increase, along with other expansionary policies, caused it to shoot up to 32 percent in 1993.

If one views the 1992 wage increase in the manner currently popular in the donor community, however, it was a major pro-poor action, because its impact on the government budget registered as a major increase in social programs. Government spending on education and health rose from 4.4 percent of GDP in 1991, to 5.6 percent in 1992, and to a peak of 6.1 percent in 1993 (when the increased wages were paid for the full year). Spending for health and education then tapered off in subsequent years, falling to 4.3 percent of GDP in 1998. This spending pattern should demonstrate clearly the limitations of using government spending on social programs as a proxy for social concern. Because 80 to 90 percent of government spending in the social sectors typically goes to wages, it is not easy to determine whether an increase in government spending for this purpose represents program expansion—new schools and teachers, and additional health workers—or simply a pay increase for the existing personnel. The latter is likely to have a very limited, if not negligible, direct impact on poverty. And in a broader sense, the Ghana pay increases probably increased poverty because of its inflationary impact.

In recent years, the government has been paying more attention to poverty reduction as a distinct goal, separate from economic growth. Leite et al (2000, 4) claim that poverty reduction has been an “overarching objective of macroeconomic policy” since 1992. This is surely an overstatement except in the orthodox sense that economic growth is expected to reduce poverty. In the subsequent discussion of the specific approach to this “overarching objective” in Ghana, Leite et al (2000, Chapter 2) make clear that little of a concrete nature occurred during the period considered in this paper. The Inter-Ministerial Committee on Poverty Reduction was established as a result of the 1995 Consultative Group meeting of donors after donors pressed for the Ghana government to show more concern about poverty. This pressure came from the donors' impression (later proved incorrect by the 1998/99 survey) that poverty had been increasing since 1992. The interministerial committee gradually developed policies, commissioned studies, and established various committees to seek ways to reduce poverty. The Thematic Group on Poverty Reduction was established in 1999 to provide a joint donor–Ghana government forum for managing and

coordinating poverty programs. Only in the future will the impact of these recent efforts become evident.

Conclusion

The poverty reduction story in Ghana appears clear. Evidence from different sources points to significant poverty reduction in Ghana between the mid-1980s and 1999. The rate at which poverty fell substantially exceeded that needed to reach the current international target for reducing the share of people in poverty by half over 25 years. The poverty reduction was associated with an orthodox stabilization and structural adjustment program supported by the World Bank and IMF. Economic growth was steady and rapid during the 15 years that followed adoption of the program, and the benefits of the growth that took place were broadly distributed. Income distribution in Ghana, said to be the most equal in Africa in the late 1980s, became more equal during the 1990s.

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